

THE AVIAN GENUS BLEDA BONAPARTE AND SOME OF ITS ALLIES

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The group of Pycnonotidae called *Bleda*, or until recently *Xenocichla*, has long been known as a very heterogeneous assemblage. No satisfactory arrangement of this genus has yet been published, nor indeed do scarcely any two authors agree concerning the proper limits of the group. It is evident on even the most superficial examination that *Bleda*, constituted for instance as it is in Dr. Sharpe's recent work,¹ contains species of several very different types of structure, which are sufficiently well characterized to warrant generic segregation. Most assuredly they are quite as different as the reasonably and almost universally recognized genera *Ixonotus*, *Phyllastrephus*, *Chlorocichla*, *Andropadus*, *Alophoixus*, and even *Trichophorus* (*Criniger* Auct.), so that if the current components of *Bleda* are to be considered congeneric, there is no good reason for not merging all the above mentioned genera into one great group, which shall include *Bleda* also. There is, in fact, no middle ground here, and if any criterion is to be set for generic subdivision, that criterion should be adhered to with at least measurable consistency. There is no difficulty in defining the groups recognized in the present revision unless they are connected by species not examined by the author, which from the descriptions of such seems not to be the case.

Very naturally the proper division and arrangement of *Bleda* has involved other closely related genera, and in order that their relationships might be best shown, these groups have been included in the succeeding exposition.

The principal measurements of which use is hereinafter made have been taken as follows:

Wing.—The distance from the bend of the wing to the tip of longest primary, taken with dividers without straightening the quills.

Tail.—The distance from the coccygeal insertion of the middle feathers to the tip of the longest rectrix.

Exposed culmen (length of bill).—The chord of the culmen, taken from its tip to the point where the feathers of the forehead impinge on its base.

¹ *Hand-List Gen. and Spec. Birds*, III, 1901, pp. 320-323.

Tarsus.—Measured from the center of the heel joint behind to the edge of the last tarsal scute in front.

This paper is based about equally on the collection of the United States National Museum and that of the Academy of Natural Sciences of Philadelphia, and the writer would here express his consequent obligations to the authorities of these institutions.

TRICHOPHORUS Temminck

Trichophorus (err. typ.) TEMMINCK, Pl. Col. III, livr. 15, 1821, pl. 88 (type *Trichophorus barbatus* Temminck).

Trichophorus TEMMINCK, Pl. Col. III, livr. 15, 1821, pl. 88 (type *Trichophorus barbatus* Temminck).

Criniger TEMMINCK, Pl. Col. III, livr. 15, 1821, pl. 88, footnote (type *Trichophorus barbatus* Temminck).

Trichas GLOGER, Froriep's Notizen, XVI, 1827, p. 278 (type *Trichophorus barbatus* Temminck).

Hypotrichas HEINE, Journ. f. Ornith., 1860, p. 138 (type *Trichophorus calurus* Cassin).

Chars. gen.—Similar to *Bleda*, but head conspicuously crested; throat feathers lengthened; nuchal hairs long, not branched; bill not higher than broad at base, its height at base more than one-third of exposed culmen, the culmen curved from base, the gonys not strongly ascending.

Description.—Tail shorter than wing, but usually not less than five-sixths of it; throat feathers lengthened; tarsus scutellate; wing $4\frac{1}{4}$ to about $5\frac{1}{2}$ times the length of the tarsus; tarsus not shorter than exposed culmen, sometimes $1\frac{1}{3}$ times as long; head distinctly crested; nuchal hairs long (25 mm. or more), not branched; rictal bristles long, reaching at least about half way to end of bill; bill stout, rather short, somewhat compressed, higher than broad at anterior edge of nostrils, but at base equal in height and breadth, or broader than high; height of bill at base more than one-third the length of exposed culmen; culmen curved from base; gonys only slightly ascending; maxillar tomium with only one subterminal notch; nostrils rounded oval, slightly or not at all operculate anteriorly, but distinctly, sometimes broadly so posteriorly; frontal feathering not extending beyond posterior edge of nostrils;¹ bristles of nostrils long and rather numerous.

Type.—*Trichophorus barbatus* TEMMINCK.

This genus as here restricted differs from all its allies below

¹ This means that no feathers grow above or below the nostrils, although those inserted behind sometimes project over or beyond the posterior portion of the open nares.

treated in the possession of a well-marked crest, and from the various individual genera in also other respects which will be evident in the following diagnoses.

The name *Criniger*, by which this group has been usually designated, is untenable, and should be replaced by *Trichophorus*. It will readily be seen, on examination of the original description of *Criniger*¹ that the characters there given might with equal propriety apply to any of several African genera of Pycnonotidae; no particular species is mentioned in connection with the name; and it is said to be founded on five *undescribed* species from western Africa!² In fact *Criniger* is here a *nomen nudum*, and is identifiable only by Temminck's later statement in his larger work where he proposes *Trichophorus* for the same birds and explicitly repudiates *Criniger*.³ In this place, after giving a detailed diagnosis of his genus *Trichophorus* he makes the following observation: "Ce genre a été indiqué dans l'Analyse du système, voyez *Manuel d'Ornithologie*, page LX"; to which he adds the following footnote: "(1) Le genre 12^e de la page citée renferme d'analyse du genre *Crinon*, que nous avons nommé en latin *Criniger*. Cette dénomination ayant été jugée vicieuse, nous proposons celle de *Trichophorus*, pour nom scientifique du genre." In view of this, there seems to be no way to avoid the rejection of *Criniger* and the acceptance of *Trichophorus*. The former, moreover, should date from the same place, but only as a synonym of *Trichophorus*. A word might also be said regarding the proper spelling of *Trichophorus*. Where the term first appears, as a heading to the generic diagnosis,⁵ it is spelled *Tricophorus*, but in the above quoted footnote on the same page, as well as in the succeeding description of *Trichophorus barbatus*, it is written *Trichophorus*, which fact seems to furnish ample justification for regarding the form "*Tricophorus*" as a typographical error, and for consequently accepting the proper spelling *Trichophorus*.

The removal of several East Indian forms which are clearly not congeneric leaves this genus a fairly homogeneous one, and admits of a satisfactory diagnosis. Some of the African species have rather

¹ Temminck, *Man. Orn.*, I, 1820, p. lx.

² "Formé de cinq espèces nouvelles qui n'ont point de type parmi celles connues; toutes sont de côtes occidentales d'Afrique; plusieurs ont un bouquet de crins à la nuque." *Idem, Ibid.*, pp. lx-lxi.

³ Pl. Col. III, livr. 15, 1821, pl. 88.

⁴ Pl. Col. III, livr. 15, 1821, pl. 88.

⁵ *Ibid.*

broader bills with a more extended nasal operculum, and vary some in other proportions, but the differences do not seem sufficiently marked to render advisable at present a further subdivision of the group.

Of the species now to be referred to this genus, one, *Trichophorus gularis* (Horsfield),¹ requires to be renamed, since its present title is preoccupied by *Turdus gularis* Latham² which is *Cinclus merula* (SCHÄFFER) (= *aquaticus* AUCT.); and it may be known as *Trichophorus xanthizurus*.

A list of the species of this genus follows :

Trichophorus chloronotus Cassin.

Trichophorus calurus Cassin.

Trichophorus verreauxi verreauxi (Sharpe).

Trichophorus verreauxi ndussumensis (Reichenow).

Trichophorus flavocolis Gould.

Trichophorus frater (Sharpe).

Trichophorus burmanicus (Oates).

Trichophorus griseiceps (Hume).

Trichophorus salangae (Sharpe).

Trichophorus xanthizurus Oberholser (= *gularis* Horsfield, nec Latham).

Trichophorus tephrogynys Jardine and Selby (= *gutturalis* Bonaparte).

Trichophorus sordidus (Richmond).

Trichophorus henrici (Oustalet).

Trichophorus pallidus (Swinhoe).

Trichophorus ruficrissus (Sharpe).

Trichophorus sumatranus (Wardlaw-Ramsay).

Trichophorus barbatus Temminck.

Trichophorus conradi (Finsch).

Trichophorus finschi (Salvadori).

Trichophorus palawanensis (Tweeddale).

ALOPHOIXUS Oates.

Alophoixus OATES, Fauna Brit. India, Birds, 1, 1889, p. 259.

Chars. gen.—Similar to *Trichophorus*, but differing chiefly in having no occipital crest, and a much less evident nasal operculum.

Description.—Tail about five-sixths of wing; throat feathers lengthened; tarsus scutellate; wing about $4\frac{1}{2}$ times the length of the tarsus; tarsus $1\frac{1}{8}$ to $1\frac{1}{4}$ times the length of exposed culmen; head not crested; nuchal hairs long (25 mm. or more), not branched; rictal bristles reaching at least half way to end of bill; bill stout, rather short, moderately compressed, higher than broad at anterior edge of nostrils, slightly broader than high at base, its height at base more than one-third the length of exposed culmen; culmen curved

¹ *Turdus gularis* Horsfield, *Trans. Linn. Soc. Lond.*, XIII, 1821, p. 150.

² *Turdus gularis* Latham, *Suppl. Ind. Orn.*, 1801, p. xl.

from base; gonys slightly ascending; maxillar tomium with but one subterminal notch; nostrils much rounded, scarcely operculate, and if at all, only posteriorly; frontal feathering not extending beyond posterior edge of nostrils; bristles of nostrils long and rather numerous.

Type.—*Ixos phaeocephalus* HARTLAUB.

This is a small group apparently well entitled to generic rank, though in most respects very similar to *Trichophorus*, with which of course it has closest affinity. Its long, unbranched nuchal hairs and lengthened throat feathers will serve readily to distinguish it from other allied genera which have rounded nostrils.

The only species of this group are:

Alophoixus phaeocephalus (Hartlaub).

Alophoixus diardi (Finsch).

IDIOCICHLA¹ gen. nov.

Chars. gen.—Similar to *Bleda*, but bill much shorter, its height at base decidedly more than one-third of exposed culmen; culmen not straight; tarsus at least $1\frac{1}{4}$ times exposed culmen.

Description.—Tail about nine-tenths of wing; throat feathers not lengthened; tarsus scutellate; wing about 4 times the length of tarsus; tarsus $1\frac{1}{3}$ to $1\frac{1}{2}$ times exposed culmen; head not crested; nuchal hairs short (less than 20 mm.), much branched; rictal bristles strong, reaching at least two-thirds the length of the bill; bill stout, rather short, compressed, much higher than broad at anterior edge of nostrils, about equal in height and breadth at base, its height at base more than one-third of exposed culmen; culmen somewhat curved; gonys decidedly ascending; maxillar tomium with but one subterminal notch; nostrils rounded oval, only slightly operculate, and that posteriorly; forehead feathered to posterior edge of nostrils; nasal bristles long and numerous.

Type.—*Trichophorus notatus* CASSIN.

This group is most closely allied to *Bleda*, and scarcely needs comparison with other genera unless possibly with *Thescelocichla*, *Alophoixus*, and *Trichophorus*, for all the others with superficial resemblance have linear or lengthened nostrils.

The species are:

Idiocichla notata (Cassin).

Idiocichla canicapilla (Hartlaub).

¹ *idios*, distinctus; *κίχλη*, turdus.

² *Postea*, p. 154.

BLEDA Bonaparte

Bleda BONAPARTE, Rev. et Mag. Zool., Feb., 1857, p. 50 (type, *Dasycephala syndactyla* Swainson).

Xenocichla HARTLAUB, Orn. Westafr., 1857, p. 86 (type, *Dasycephala syndactyla* Swainson).

Chars. gen.—Resembling *Alophoixus*, but throat feathers not lengthened; nuchal hairs short (less than 20 mm.), much branched; tarsus about equal to exposed culmen; height of bill at base not more than one-third of exposed culmen; gonys strongly ascending; bill longer and more compressed, the culmen straight except at decurved tip; nasal operculum more evident.

Description.—Tail about nine-tenths of wing; throat feathers not lengthened; tarsus scutellate; wing about $4\frac{1}{2}$ times the tarsus; exposed culmen and tarsus about equal; head not crested; nuchal hairs short (less than 20 mm.), much branched; rictal bristles long, reaching about half way to end of bill; bill large and stout, decidedly compressed, higher than broad at base and at anterior edge of nostrils, the height at base about equal to one-third of exposed culmen, but sometimes less; culmen straight, except of course at decurved tip; gonys strongly ascending, the angle conspicuous; maxilla with but one subterminal notch; nostrils rounded oval, somewhat operculate, chiefly posteriorly; frontal feathering not extending beyond hinder edge of nostrils; nasal bristles long and rather numerous.

Type.—*Dasycephala syndactyla* SWAINSON.

As here constituted, this is a fairly well defined group, and by reason of the structure of the nostrils much more nearly related to *Trichophorus*, *Alophoixus*, *Idiocichla*, and *Thescelocichla* than to several other groups that have, like the two latter, often, if not usually, been considered congeneric.

The species here included in this genus are:

Bleda syndactyla (Swainson).

Bleda eximia (Hartlaub).

Bleda xavieri (Oustalet).

Bleda multicolor (Bocage).

THESCLOCICHLA¹ gen. nov.

Chars. gen.—Similar to *Bleda*, but rictal bristles weak; bill shorter, not so stout, its height less than its breadth at base, but more than one-third of exposed culmen; culmen curved at least on distal two-thirds; gonys almost horizontal; tarsus about $1\frac{1}{3}$ times exposed culmen.

¹ Θέσκελος, mirabilis; κίχλη, turdus.

Description.—Tail about nine-tenths of wing; throat feathers not lengthened; tarsus rather lightly scutellate; wing about $4\frac{1}{4}$ times the tarsus; tarsus about $1\frac{1}{3}$ times exposed culmen; head not crested; nuchal hairs short (less than 20 mm.), branched; rictal bristles weak, reaching only about one-third the length of the bill, not extending beyond the anterior edge of nostrils; bill rather strong, moderately lengthened, somewhat compressed, higher than broad at anterior edge of nostrils, but broader than high at base, its height at base more than one-third of exposed culmen; culmen curved almost from base; gonys only slightly ascending; maxillar tomium with but one subterminal notch; nostrils rounded oval, a very little or not at all operculate, posteriorly; frontal feathering not extending beyond posterior margin of nostrils; bristles of nostrils few and short.

Type.—*Phyllastrephus leucopleurus* CASSIN.

This genus is so different from *Bleda* (*syndactyla*) that it seems rather remarkably to have escaped separation until now. Of its other allies possessing roundish nostrils it needs further comparison with only *Idiocichla*, from which, however, it is easily distinguished.

Apparently the only species belonging here is:

Thescelocichla leucopleura (Cassin).

ATIMASTILLAS¹ gen. nov.

Chars. gen.—Resembling *Bleda*, but nostrils lengthened; rictal bristles weak; height of bill at base much more than one-third of exposed culmen; culmen curved from base; gonys but slightly ascending, the angle not conspicuous; tarsus much longer than culmen; bristles of nostrils few and short.

Description.—Tail about equal to wing or slightly less; throat feathers not lengthened; tarsus scutellate; wing about $4\frac{1}{3}$ times the tarsus; tarsus about $1\frac{3}{8}$ times the exposed culmen; head not crested; nuchal hairs short, branched; rictal bristles weak, reaching not more than one-third the length of bill, and not beyond anterior edge of nostrils; bill stout, rather short, somewhat compressed, higher than broad at anterior edge of nostrils, about equal in height and breadth at base, its height at base nearly one-half the exposed culmen; culmen much curved from base; gonys only a little ascending; maxilla with but one subterminal notch; nostrils lengthened oval, operculate; frontal feathering not extending beyond posterior edge of nostrils; nasal bristles very few and short.

¹ ἀτίμαστος, neglectus; ἰλλάς, turdus.

Type.—*Hacmatornis flavicollis* SWAINSON.

This genus is superficially close to *Thescelocichla*, but aside from the lengthened, conspicuously operculate nostrils, by which it may be readily distinguished, it has a somewhat shorter tail, and a much more arched bill.

The four forms here referred to this genus are apparently only subspecifically distinct:

Atimastillas flavicollis flavicollis (Swainson).

Atimastillas flavicollis shelleyi (Neumann).

Atimastillas flavicollis pallidigula (Sharpe).

Atimastillas flavicollis flavigula (Cabanis).

PROSPHOROCICHLA¹ nom. nov.

Pyrrhurus CASSIN, Proc. Acad. Nat. Sci. Phila., 1859, p. 46 (type *Phyllastrephus scandens* Swainson) (nec *Pyrrhura* Bonaparte).

Chars. gen.—Similar to *Bleda*, but nostrils lengthened, conspicuously operculate; rictal and nasal bristles weaker; culmen curved from base; gonys only slightly ascending; bill shorter, somewhat depressed, its height less than its breadth at base, its height at base more than one-third the exposed culmen; tarsus about $1\frac{1}{2}$ times the length of exposed culmen.

Description.—Tail about nine-tenths of wing, or slightly more; throat feathers not lengthened; tarsus scutellate; wing 4 to $4\frac{1}{4}$ times the tarsus; tarsus $1\frac{1}{2}$ to $1\frac{3}{4}$ times the exposed culmen; head not crested; nuchal hairs rather long, much branched; rictal bristles rather weak, not reaching half the length of the bill; bill of moderate length, somewhat depressed, higher than broad at anterior edge of nostrils, broader than high at base, the height at base more than one-third the exposed culmen; culmen curved almost from base; gonys but slightly ascending; maxilla with but one subterminal notch; nostrils lengthened oval, operculate throughout; frontal feathering not extending beyond posterior edge of nostrils; nasal bristles few and rather short.

Type.—*Phyllastrephus scandens* SWAINSON.

Captain Shelley has united *Ptyrticus* Hartlaub with the present group,² but an examination of even the description and figures of *Ptyrticus*³ seems quite sufficient to indicate that it is very different; furthermore, it apparently does not belong in the same family!

This genus was long ago named *Pyrrhurus* by Cassin,⁴ but

¹ πρὸσφορος, similis; κίχλη, turdus.

² *Ibis*, 1899, p. 373.

³ Hartlaub, *Zool. Jahrb.*, II, 1887, p. 314, pl. XI, fig. 1.

⁴ *Proc. Acad. Nat. Sci. Phila.*, 1859, p. 46.

Pyrhrurus is preoccupied by *Pyrhrura* Bonaparte¹ given to a group of Psittacidae; and, as there are no synonyms, it has been renamed as above.

An examination of the specimens of *Prosporphocichla scandens* from the Ogobai, or Ogowe, River, Gabun, recorded by Cassin as *Pyrhrurus pallescens*,² and still in the Academy of Natural Sciences of Philadelphia, has developed the fact that they are very different from true *scandens* of Senegal. Since *Trichophorus pallescens* Hartlaub³ is based on specimens from Gambia, and is identical with *scandens*, the Gabun bird is apparently without a name. Through the courtesy of Mr. Witmer Stone it is here described, and called:

PROSPHOROCICHLA SCANDENS ACEDIS subsp. nov.

Chars. subsp.—Similar to *Prosporphocichla scandens scandens*, but decidedly smaller; entire upper parts, with sides of head, darker, the lores barely paler than the crown, and together with the back and scapulars, less ochraceous (more grayish), the rump less tawny; superior wing-coverts and outer vanes of primaries much more grayish (less rufescent), barely different from the back; under wing-coverts darker, more grayish; lower parts, excepting the crissum, grayish white without buff or cream color, except for a faint tinge on the middle of lower breast and abdomen.

Description.—Type, adult, sex unknown, No. 17,028, collection Academy Nat. Sci. Phila.; Ogobai River, Gabun, western Africa, 1858; P. Du Chaillu. Head brownish slate, lighter on forehead; back and scapulars grayish brown; rump more rufescent; upper tail-coverts and tail tawny, the shafts paler; wing-quills and their superior coverts grayish brown, scarcely more rufescent than the back, the exterior margins of most of the outer primaries a little paler; lores and sides of head and neck brownish slate gray about like the forehead but rather more brownish; lower parts dull white, shaded with gray across the breast and with brownish gray on the sides and flanks, the center of abdomen and lower breast slightly washed with yellowish; crissum buff; under wing-coverts olive gray mixed with yellowish.

From *Prosporphocichla scandens orientalis*⁴ this new form differs

¹ Bonaparte, *Naumannia*, 1856, p. 352 (table); Souancé, *Rev. et Mag. Zool.*, 1857, p. 97; Bonaparte, *Compt. Rend.*, XLIV, 1857, p. 538.

² *Proc. Acad. Nat. Sci. Phila.*, 1859, p. 46.

³ *Orn. Westafr.*, 1857, p. 86.

⁴ *Xenocichla orientalis* Hartlaub, *Journ. f. Ornith.*, 1883, p. 425 (Tamaja, British Equatorial Africa).

in larger size; much darker top and sides of head; darker sides of neck; and less yellowish lower surface.

Comparative measurements of the three forms are as follows:

Name.	Locality.	Wing.	Tail.	Exposed Culmen.	Tarsus.	Middle Toe.
<i>Prosporocichla scandens scandens</i> .	Senegal.	118	109	15.5 ³	27.5	18
<i>Prosporocichla scandens acedis</i> . ¹	Ogobai River, Gabun.	96	88	15.5	23	16
<i>Prosporocichla scandens acedis</i> .	Ogobai River, Gabun.	100	96	15.5	25	16.5
<i>Prosporocichla scandens orientalis</i> . ²	Tamaja, British Equatorial Africa.	93	80	15	22	—

This genus apparently comprises only the following:

Prosporocichla scandens scandens (Swainson) (= *palescens* Hartlaub).

Prosporocichla scandens acedis Oberholser.

Prosporocichla scandens orientalis (Hartlaub).

BAEOPOGON Heine

Baeopogon HEINE, Journ. f. Ornith., 1860, p. 139.

Chars. gen.—Somewhat resembling *Bleda*, but tail very much shorter; nostrils linear, operculate; bill shorter, much depressed, broader than high at base, the culmen curved almost throughout, the gonys but slightly ascending; rictal and nasal bristles much shorter; tarsus relatively longer.

Description.—Tail about three-fourths of wing; throat feathers not lengthened; tarsus strongly scutellate; wing nearly 5 times the tarsus; tarsus $1\frac{1}{4}$ times the culmen; head not crested; hairs on nape short, much compound; rictal bristles reaching about one-third the length of the bill, not beyond the anterior margin of nostrils; bill rather short and stout, decidedly depressed, much broader than high both at base and anterior edge of nostrils, its height at base about equal to one-third the length of exposed culmen; culmen moderately curved almost or quite from base; gonys but slightly ascending; maxillar tomium with only one subterminal notch; nostrils linear, strongly operculate, the frontal feathering not extending beyond their posterior margin; nasal vibrissae few and short.

Type.—*Crimiger indicator* VERREAUX.

This very distinct genus may easily be distinguished from all its

¹ Type.

² Measurements from original description, *loc. cit.*

³ Imperfect.

allies by its much abbreviated tail, as well as by various other excellent characters.

The species are:

Bacopogon indicator (Verreaux) (= *batesi* Sharpe).

Bacopogon clamans (Sjöstedt).

IXONOTUS Verreaux

Ixonotus VERREAUX, Rev. et Mag. Zool., 1851, p. 306.

Chars. gen.—Similar to *Prospborocichla*, but nuchal hairs shorter, not branched; tarsus relatively shorter; bill shorter, equal in height and breadth at anterior edge of nostrils, its height at base about equal to one-third the length of exposed culmen.

Description.—Tail about nine-tenths of wing; throat feathers not lengthened; tarsus scutellate; wing about $4\frac{1}{4}$ times the tarsus; tarsus about $1\frac{3}{8}$ times the exposed culmen; head not crested; nuchal hairs very short, not branched; rictal bristles not reaching half the length of the bill—but little beyond anterior edge of nostrils; bill rather short, somewhat depressed, with height and breadth about equal at anterior edge of nostrils, the height less than the breadth at base, the height at base about equal to one-third the exposed culmen; culmen curved from base; gonys only slightly ascending; maxilla with only one subterminal notch; nostrils almost linear, operculate, the frontal feathering extending only to their posterior margin; nasal bristles few and short.

Type.—*Ixonotus guttatus* VERREAUX.

This genus is apparently most closely allied to *Prospborocichla*, from which it differs as above stated, but these characters are by no means as great as those separating *Prospborocichla* from *Bleda*; and *Ixonotus*, so many and decided are its differences, hardly needs comparison with *Bleda* as here restricted.

The two species of this group are:

Ixonotus guttatus Verreaux.

Ixonotus landanae Oustalet.

PHYLLASTREPHUS Swainson

Phyllastrephus SWAINSON, Fauna Bor. Amer., II, 1831, p. 486 (type *Le Jaboteur*, Levaillant).

Phyllostrophus SUNDEVALL, Av. Disp. Tentamen, 1872, p. 20 (nom. emend. pro *Phyllastrephus*).

Chars. gen.—Similar to *Ixonotus*, but bill longer, more slender, somewhat compressed, higher than broad at anterior edge of nostrils, the culmen almost straight except at tip; nostrils more oval; nuchal hairs much branched.

Description.—Tail less than wing, but usually at least nine-tenths of it; throat feathers not lengthened; tarsus scutellate; wing $3\frac{1}{2}$ to $4\frac{1}{2}$ times the tarsus; tarsus $1\frac{1}{3}$ to $1\frac{1}{2}$ times the culmen; head not crested; nuchal hairs short, much branched; rictal bristles rather weak, not reaching beyond the middle of the bill; bill rather long and slender, somewhat compressed, higher than broad at anterior edge of nostrils, approximately equal in height and breadth at base, the height at base about equal to one-third the length of exposed culmen; culmen almost straight except at tip; gonys nearly straight—only slightly ascending; maxillar tomium with but one subterminal notch; nostrils lengthened oval, operculate, the frontal feathering not extending to their posterior margin; nasal bristles few and short.

Type.—*Phyllastrephus terrestris* SWAINSON.

The rather long, slender bill, and straight culmen, in combination with various other characters, render this genus easily distinguishable from all its allies.

The following species appear to be referable to this group, though a few of them are somewhat aberrant:

Phyllastrephus terrestris terrestris Swainson (= *capensis* Swainson).¹

Phyllastrephus terrestris suahelicus (Reichenow).

Phyllastrephus strepitans strepitans (Reichenow) (= *sharppei* Shelley).

Phyllastrephus strepitans rufescens (Hartlaub) (= *pauper* Sharpe, et *parvus* Fischer and Reichenow).

Phyllastrephus cerviniventris Shelley.

Phyllastrephus fulviventris Cabanis.

Phyllastrephus simplex (Hartlaub) (= *harterti* Reichenow, et *marchei* Oustalet).

Phyllastrephus placidus (Shelley).

Phyllastrephus poensis Alexander.

Phyllastrephus cabanisi cabanisi (Sharpe).

Phyllastrephus cabanisi sucosus (Reichenow).

Phyllastrephus baumanni Reichenow.

Phyllastrephus flavostriatus (Sharpe) (= *tenuirostris* Fischer and Reichenow).

Phyllastrephus alfredi (Shelley).

Phyllastrephus debilis (W. Sclater).

Phyllastrephus fischeri (Reichenow).

Phyllastrephus kretschmeri Reichenow and Naumann.

ARGALEOCICHLA² gen. nov.

Chars. gen.—Similar to *Phyllastrephus*, but bill more depressed, much broader than high at base, about equal in height and breadth at anterior edge of nostrils, the height at base much less than one-

¹ Cf. Richmond, *Auk*, 1900, p. 179.

² ἀργαλέος, difficilis; κίχλη, turdus.

third the length of exposed culmen; nostrils more lengthened; tarsus less than $1\frac{1}{4}$ times the length of exposed culmen; nuchal hairs less branched; rictal and nasal bristles decidedly longer.

Description.—Tail about nine-tenths of wing; throat feathers not lengthened; tarsus scutellate; wing about 4 times the tarsus; tarsus $1\frac{1}{2}$ times the exposed culmen; head not crested; nuchal hairs short (less than 20 mm.), slightly branched; rictal bristles long, reaching about two-thirds the length of the bill; bill long, rather slender, depressed, equal in height and breadth at anterior edge of nostrils, much broader than high at base, its height at the latter point much less than one-third the length of exposed culmen; culmen, except at tip, straight or even slightly concave; gonys somewhat ascending; maxilla with one subterminal notch; nostrils linear, operculate, the frontal feathering extending only to their posterior margin; bristles of nostrils long and rather numerous.

Type.—*Trichophorus icterinus* BONAPARTE.

The present more careful examination has convinced us that we were wrong in considering the type of this genus congeneric with *Bleda syndactyla*.¹ It is in reality very distinct, differing from *Bleda* in its linear nostrils; less branched nuchal hairs; relatively longer rictal bristles; more slender, depressed bill, with less sharply ascending gonys; and longer tarsus, as compared with length of culmen. The generic separation of this species from *Criniger ictericus* Strickland will doubtless do away with all objection to the use of its earliest and therefore correct specific name *icterina*.

Some doubt exists regarding the reference of *Xenocichla poliocephala* Reichenow to this genus, as the species has not been available for examination. It certainly does not belong in *Bleda*, nor do its characters, in so far as they have been expressed in published diagnoses, seem to fit any other genus so well as *Argaleocichla*. It is even possible that a new genus will be necessary for its reception.

The only species that appear to belong under this heading are:

Argaleocichla icterina (Bonaparte) (= tricolor Cassin).

Argaleocichla poliocephala (Reichenow).

THAPSINILLAS² gen. nov.

Chars. gen.—Similar to *Trichophorus*, but head not crested; throat feathers not lengthened; nuchal hairs short; nostrils linear, operculate; tarsus much shorter than culmen, and more than $5\frac{1}{2}$ times con-

¹ *Proc. U. S. Nat. Mus.*, xxii, 1899, p. 14.

² Θάψινος, flavus; ἰλλάς, turdus.

tained in the length of wing; bill longer and relatively more slender, the culmen almost straight; rictal bristles much weaker.

Description.—Tail about nine-tenths of wing; throat feathers not lengthened; tarsus slightly scutellate; wing about $5\frac{3}{4}$ to 6 times the length of tarsus; tarsus only about five-sixths of exposed culmen; head not crested; nuchal hairs short, not branched; rictal bristles rather weak, reaching about one-third the length of bill, and scarcely beyond the nostrils; bill lengthened, somewhat compressed, higher than broad at anterior edge of nostrils; not quite so high as broad at base, the height at base about equal to one-third the exposed culmen; culmen only slightly curved—almost straight except at tip; gonys distinctly ascending; maxillar tomium with but one sub-terminal notch; nostrils more or less linear, much operculate, the frontal feathering not extending beyond their posterior edge; nasal vibrissæ long and moderately numerous.

Type.—*Criniger affinis* HOMBRON and JACQUINOT.

The species of this genus, though heretofore included in *Trichophorus*, are really very different in structural details from the typical members of the latter, and indeed are much more closely allied to *Phyllastrephus*, *Argaleocichla*, and several other African groups. From all the related genera with lengthened nostrils *Thapsinillas* may easily be distinguished, however, by its very short tarsus, this being considerably less than the exposed culmen.

The following species belong here:

Thapsinillas affinis (Jacquinot and Pucheran).

Thapsinillas mystacalis (Wallace).

Thapsinillas longirostris (Wallace).

Thapsinillas platenae (W. Blasius).

Thapsinillas aurca (Walden).

ACRITILLAS¹ gen. nov.

Chars. gen.—Somewhat similar to *Bleda*, but nostrils linear, operculate; nuchal hairs not appreciably branched; bill much shorter, more slender, depressed, the culmen curved from base, the gonys nearly or quite horizontal; tarsus decidedly longer than culmen.

Description.—Tail a little more than nine-tenths of wing; throat feathers not lengthened; tarsus at least slightly scutellate; wing $4\frac{1}{4}$ to $4\frac{3}{4}$ times the tarsus; tarsus $1\frac{1}{8}$ times the exposed culmen; head not crested; hairs on occiput and nape short, not branched; rictal bristles reaching from one-third to one-half the length of the bill; bill rather slender, somewhat depressed, higher than broad at anterior

¹ ἀκριτος, confusus; ἰλλῆς, turdus.

edge of nostrils, broader than high at base, its height at the latter point about equal to one-third of the exposed culmen; culmen curved from base; gonys straight or very nearly so; maxilla with but one subterminal notch; nostrils linear, strongly operculate, the frontal feathering extending not beyond their posterior margin; bristles of nostrils rather few and of moderate length.

Type.—*Criniger ictericus* STRICKLAND.

In many of its characters this genus is far removed from *Bleda*, and is indeed much nearer even *Thapsinillas*. Its points of difference from all neighboring groups may be easily seen by consulting the diagnoses given.

Apparently the only species referable here are :

Acritillas icterica (Strickland).

Acritillas chloris (Finsch).

Acritillas lucasi (Hartert).

ARIZELOCICHLA¹ gen. nov.

Chars. gen.—In some respects resembling *Bleda*, but nostrils linear, strongly operculate, the basal half of the operculum more or less feathered; bill much shorter, more turdine, depressed at base, its height at this point decidedly more than one-third the length of exposed culmen; culmen curved from base; gonys almost horizontal; tarsus very much longer than exposed culmen.

Description.—Tail about nine-tenths of wing, or somewhat more; throat feathers not lengthened; tarsus scutellate; wing $3\frac{3}{4}$ to $4\frac{1}{4}$ times the tarsus; tarsus $1\frac{2}{5}$ to $1\frac{3}{5}$ times the exposed culmen; head not crested; nuchal hairs short, much branched; rectal bristles reaching about half way to end of bill; bill moderately slender, very thrush-like, somewhat depressed, higher than broad at anterior edge of nostrils, decidedly broader than high at base, its height at base more than one-third the length of exposed culmen; culmen curved nearly or quite from base; gonys only slightly ascending; maxilla with but one subterminal notch; nostrils linear, much operculate, the frontal feathering extending more or less continuously above them to about the middle of the operculum; nasal bristles few and rather short.

Type.—*Xenocichla nigriceps* SHELLEY.

Excellent evidence of the hitherto unsatisfactory generic position of the type and several other species of this group is the manner in which various authors have treated them, placing them first in one genus, then in another, with scarcely any uniformity or agreement. Least of all the genera to which they have been at times referred

¹ ἀριζήλος, evidens; κίχλη, turdus.

do they belong in *Bleda*; but find apparently their nearest ally in *Chlorocichla*, from which, however, they may be readily distinguished.

The species are:

- Arizelocichla nigriceps* (Shelley).
- Arizelocichla olivacea* (Swainson).
- Arizelocichla albigularis* (Sharpe) (= *leucolaema* Sharpe).
- Arizelocichla fusciceps* (Shelley).
- Arizelocichla falkensteini* (Reichenow).
- Arizelocichla chlorigula* (Reichenow) (= *chlorolaema* Sharpe).
- Arizelocichla striifacies* (Reichenow and Neumann).
- Arizelocichla kikuyuensis* (Sharpe).
- Arizelocichla milanjensis* (Shelley).
- Arizelocichla kakamejae* (Sharpe).
- Arizelocichla tephrolaema* (Gray).

CHLOROCICHLA Sharpe

Chlorocichla SHARPE, Cat. Birds Brit. Mus., VI, 1881, p. 112.

Chars. gen.—Similar to *Arizelocichla*, but tail about equal to wing; nuchal hairs rather shorter; bill stouter, more compressed, and relatively shorter, the frontal feathering extending farther out on nasal operculum.

Description.—Tail equal to wing, or very slightly shorter; throat feathers not lengthened; tarsus strongly scutellate; wing about $3\frac{3}{4}$ times the length of tarsus; tarsus about $1\frac{1}{2}$ times the exposed culmen; head not crested; hairs on nucha short, branched; rictal bristles rather weak, reaching about half way to end of bill; bill moderately short, somewhat stout and compressed, higher than broad at anterior edge of nostrils, broader than high at base, the height at base, however, more than one-third the length of exposed culmen; culmen curved from base; gonys slightly ascending; maxilla with one subterminal notch; nostrils almost linear, operculate, the basal three-fourths of the operculum more or less feathered; nasal bristles few and short.

Type.—*Trichophorus flaviventris* SMITH.

This excellent genus is very different from both *Bleda* and *Phyllastrephus*, under each of which it has at times been placed. All its forms appear to be subspecies of a single species.

They are:

- Chlorocichla flaviventris flaviventris* (Smith).
- Chlorocichla flaviventris mombasae* (Shelley).
- Chlorocichla flaviventris centralis* (Reichenow).
- Chlorocichla flaviventris zambesiae* (Shelley).
- Chlorocichla flaviventris occidentalis* (Sharpe).

STELGIDILLAS Oberholser

Stelgidillas OBERHOLSER, Proc. U. S. Nat. Mus., XXII, 1899, p. 30.

Chars. gen.—Similar to *Arizelocichla*, but maxilla with several (3 to 4) subterminal notches; bill proportionately longer and more slender, its height at base less than one-third the length of exposed culmen, the culmen nearly straight except at tip; rictal bristles much shorter; nuchal hairs not noticeably branched.

Description.—Tail slightly more than nine-tenths of wing, but not equal to wing; throat feathers not lengthened; tarsus rather lightly scutellate; wing about 4 times the length of tarsus; tarsus about $1\frac{1}{4}$ times the exposed culmen; head not crested; nuchal hairs short, not appreciably branched; rictal bristles short and weak, reaching but little beyond the anterior edge of nostrils; bill rather long and comparatively slender, depressed, equal in height and breadth at anterior edge of nostrils, broader than high at base, the height at the latter point less than one-third the length of exposed culmen; culmen only slightly curved—nearly straight, except at tip; gonys almost horizontal, though a little ascending; maxillar tomium with several (3 to 4) subterminal notches, of which the distal one is the most pronounced; nostrils almost linear, much operculate, the operculum feathered, though rather sparsely, on its basal half; nasal bristles few and rather short.

Type.—*Andropadus gracilirostris* STRICKLAND.

This peculiar genus forms the first transition step from the long billed forms with a single subterminal maxillar notch, to the short billed ones with a serrate maxilla. The unbranched nuchal hairs show some relationship with *Trichophorus*, while the much lengthened nostrils indicate its affinity with such groups as *Arizelocichla*, *Acritillas*, and *Argalecicichla*.

There seems to be but a single species referable here, which with its several subspecies, is as follows:

Stelgidillas gracilirostris gracilirostris (Strickland).

Stelgidillas gracilirostris liberiensis (Reichenow).

Stelgidillas gracilirostris poensis (Alexander).

Stelgidillas gracilirostris percivali (Neumann).

CALYPTOCICHLA¹ nom. nov.

Trichites HEINE, Journ. f. Ornith., 1860, p. 139 (type *Criniger serinus* Verreaux) (nec Lycett 1850).

Chars. gen.—Similar to *Stelgidillas*, but nasal operculum densely feathered quite to anterior margin; bill relatively shorter, higher

¹ καλυπτός, coöpertus; κίχλη, turdus.

than broad at anterior edge of nostrils, its height at base about equal to one-third the length of exposed culmen; culmen much more curved; rictal bristles weaker.

Description.—Tail about nine-tenths of wing; throat feathers not lengthened; tarsus scutellate; wing about 4 times the length of tarsus; tarsus about $1\frac{1}{2}$ times the exposed culmen; head not crested; nuchal hairs short, not branched; rictal bristles weak, reaching less than one-fourth the length of bill, and not beyond the anterior edge of nostrils; bill rather slender, depressed basally, higher than broad at anterior margin of nostrils, decidedly broader than high at base, its height at base equal to one-third of exposed culmen; culmen much curved; gonys practically horizontal; maxillar tomium with several subterminal notches; nostrils linear, slit-like, strongly operculate, the operculum densely feathered throughout; nasal bristles short and very few in number.

Type.—*Criniger serinus* VERREAUX.

This genus is notable for its closely and completely feathered nasal operculum, in which respect it is differentiated from all its allies. It seems undoubtedly to be most nearly related to *Stelgidillas*, but is in many respects intermediate between the latter and *Andropadus*. With other genera, already treated, it scarcely needs comparison.

The name *Trichites*, long ago given to this group by Heine,¹ is preoccupied by *Trichites* Lycett,² for a fossil mollusk, and has therefore been replaced by the name above used.

The type is the only species, and should stand as:

Calyptocichla serina (Verreaux).

ANDROPADUS Swainson

Andropadus SWAINSON, Fauna Bor.-Amer., II, 1831, p. 485 (type *L'importun*, Levaillant).

Polyodon LAFRESNAYE, Mag. Zool., 1832, Cl. II, pl. 4 (type *Turdus importunus* Vieillot).

Chars. gen.—Similar to *Calyptocichla*, but bill relatively shorter, stouter, decidedly compressed, its height at base more than one-third the length of exposed culmen; tarsus at least $1\frac{1}{2}$ times the exposed culmen; nostrils wider; nasal operculum feathered on only its basal half, and much less densely; rictal bristles longer; nuchal hairs branched.

Description.—Tail less than wing, but more than nine-tenths its length; throat feathers not lengthened; tarsus strongly scutellate;

¹ *Journ. f. Ornith.*, 1860, p. 139.

² *Ann. and Mag. Nat. Hist.*, Ser. 2, v, 1850, p. 343.

wing about 4 times the tarsus; tarsus $1\frac{1}{2}$ to $1\frac{3}{4}$ times the exposed culmen; head not crested; nuchal hairs short, branched; rictal bristles rather short and weak, reaching less than half the length of the bill; bill short, stout, compressed, much higher than broad at anterior edge of nostrils, equal in height and breadth at base, its height at latter point more than one-third of exposed culmen; culmen ridged, curved from base; gonys a little ascending; maxilla with several subterminal notches or tooth-like serrations on its cutting edge; nostrils almost linear, much operculate, the basal half of operculum more or less feathered; nasal bristles few and short, reaching scarcely beyond the anterior margin of nostrils.

Type.—*Turdus importunus* VIEILLOT.

The presence of serrations on the distal portion of the cutting edge of the maxilla in this and several allied genera is a good character, though by no means the sole means by which these groups may be separated from *Arizelocichla* and its near relatives, for even without it they can be excellently diagnosed. Captain Shelley,¹ however, claims that this character is worthless, since an occasional specimen is found that does not possess the serrations; but it seems quite unnecessary to reject this as a means of diagnosis simply because in a very few immature or aberrant individuals it does not appear. Such a principle generally applied might seriously endanger some very good and widely recognized genera! In the particular cases now under consideration, moreover, the serrations on the maxillary tomium are so conspicuous, so nearly always present, and so entirely absent in all the other genera of this paper, that there seems to be more than ample reason for their conspicuous employment in diagnoses.

Some of the recently described forms of this group have not been available for examination, but they seem to be correctly placed. Assuming this to be so, this genus consists of the following:

Andropadus importunus (Vieillot).

Andropadus masukuensis Shelley.

Andropadus curvirostris curvirostris Cassin (= *cameronensis* Reichenow).

Andropadus curvirostris alexandri (Oustalet).

Andropadus insularis insularis Hartlaub (= *flavescens* Hartlaub; *oleaginus* Peters).

Andropadus insularis subalaris Reichenow.

Andropadus insularis somaliensis Reichenow.

Andropadus lactissimus Sharpe.

¹ *Ibis*, 1899, p. 372.

CHARITILLAS¹ gen. nov.

Chars. gen.—Similar to *Stelgidillas*, but bill much shorter, the height at base more than one-third the exposed culmen, the culmen ridged and curved from base; tarsus relatively shorter; frontal feathering not extending beyond posterior edge of nostrils; nuchal hairs much shorter; rictal and nasal bristles longer.

Description.—Tail nine-tenths of wing; throat feathers not lengthened; tarsus scutellate; wing $4\frac{3}{4}$ times the length of tarsus; tarsus about $1\frac{1}{2}$ times the exposed culmen; head not crested; nuchal hairs very short—scarcely noticeable, little if any branched; rictal bristles reaching half the length of bill; bill short, moderately slender, somewhat compressed, higher than broad at anterior edge of nostrils, about equal in height and breadth at base, its height at the latter point more than one-third the length of exposed culmen; culmen much ridged, curved from base; gonys only very slightly ascending; maxillar tomium with several (4 to 5) conspicuous subterminal notches; nostrils much lengthened, almost linear, strongly operculate; the operculum bare of feathers, but the nostrils partially covered by the nasal bristles and antrorse frontal plumes; nasal bristles long and rather numerous.

Type.—*Andropadus gracilis* CABANIS.

The type and apparently sole species of this genus was hesitantly placed by the writer in *Stelgidillas*,² and the present examination shows that it certainly does not belong there; Dr. Sharpe has recently removed it to *Eurillas*³ where it is still more out of place. From the latter genus *Charitillas* differs decidedly in its much lengthened, strongly operculate nostrils; much more slender and compressed bill, with more distinctly ridged culmen; relatively shorter tarsus; shorter nuchal hairs; and somewhat weaker rictal bristles.

The only species is:

Charitillas gracilis (Cabanis) (= *minor* Bocage).

STELGIDOCICHLA⁴ gen. nov.

Chars. gen.—Similar to *Eurillas*, but bill longer, relatively more narrow, its height at base equal to one-third the length of exposed culmen; culmen more ridged, and straight, or even slightly concave, except of course at tip; nostrils not quite so much rounded; nasal

¹ χάρις, gratia; ἰλλα, turdus.

² *Proc. U. S. Nat. Mus.*, xxii, 1899, pp. 30-31.

³ *Ibis*, 1904, p. 635.

⁴ στειγίς, strigilis; κίχλη, turdus.

operculum feathered for nearly its basal half; lateral feathers of throat much lengthened; and tarsus relatively longer.

Description.—Tail less than wing, but more than nine-tenths of it; middle throat feathers not lengthened, lateral ones much longer, forming on each side a conspicuous moustache; tarsus but lightly scutellate, sometimes almost imperceptibly; wing $3\frac{3}{4}$ times the tarsus; tarsus about $1\frac{2}{5}$ times the exposed culmen; head not crested; nuchal hairs short, branched; rictal bristles long, reaching about two-thirds the length of the bill; bill rather short, broad, much depressed, wider than high at anterior edge of nostrils, and much so at base, its height at base equal to one-third the length of exposed culmen; culmen much ridged, straight or slightly concave, except at decurved tip; gonyes slightly ascending; cutting edge of maxilla with several sub-terminal notches; nostrils oval, slightly operculate; basal portion of operculum rather sparsely feathered to about the middle of nostril; nasal bristles long and rather numerous.

Type.—*Andropadus latirostris* STRICKLAND.

Although superficially close to *Eurillas* this group really differs very considerably, as above detailed; while by reason of its serrate maxilla, broad bill, and roundish nostrils it scarcely needs comparison with other genera.

Its forms are:

Stelgidocichla latirostris latirostris (Strickland).

Stelgidocichla latirostris eugenia (Reichenow).

Stelgidocichla latirostris congener (Reichenow).

Stelgidocichla latirostris efulensis (Sharpe).

EURILLAS Oberholser

Eurillas OBERHOLSER, Proc. U. S. Nat. Mus., XXII, 1899, p. 15.

Chars. gen.—Somewhat similar to *Andropadus*, but nostrils rounded oval, little operculate; bill shorter, broader, much depressed, the culmen less ridged; rictal and nasal bristles decidedly longer; tail relatively somewhat shorter.

Description.—Tail about nine-tenths of wing; throat feathers not lengthened; tarsus scutellate; wing about 4 times the tarsus; tarsus about $1\frac{1}{2}$ times the exposed culmen; head not crested; nuchal hairs short, branched; rictal bristles long, reaching to between one-half and two-thirds the length of the bill; bill short, broad, much depressed, wider than high at anterior edge of nostrils, much so at base, where its height is barely more than half its width, the height at base, however, more than one-third the length of exposed culmen; culmen not much ridged, at least appreciably curved from base,

sometimes decidedly so; gonys slightly ascending; maxillar tomium with several notches on its distal portion; nostrils rounded oval, a little operculate basally, not at all anteriorly, the frontal feathering not extending beyond the posterior margin of nostrils; nasal bristles long and rather numerous.

Type.—*Andropadus virens* CASSIN.

The roundish nostrils at once separate this very distinct genus from all its relatives with serrate maxilla, excepting *Stelgidocichla*, and from this it may easily be distinguished by other characters, as above shown.

The species are:

Eurillas virens virens (Cassin).

Eurillas virens griseocens (Reichenow).

Eurillas virens zombensis (Shelley) (= *marwitzi* Reichenow).

Eurillas montana (Reichenow).

Following is a key to the genera treated in the present connection:

A.—Maxillar tomium with two or more subterminal notches.

a.—Nostrils roundish oval and but little operculate.

b.—Bill shorter and broader, its height at base decidedly more than one-third the length of exposed culmen; frontal feathering not extending beyond posterior edge of nostrils; lateral feathers of throat not lengthened.....*Eurillas*

b'.—Bill longer and more narrow, its height at base about equal to one-third the length of exposed culmen; frontal feathering extending superiorly to middle of nostrils; lateral feathers of throat conspicuously lengthened.....*Stelgidocichla*

a'.—Nostrils linear or lengthened oval, much operculate.

b.—Narial operculum densely feathered to anterior edge of nostril*Calyptrichla*

b'.—Narial operculum sparsely feathered, and not much, if any, beyond middle of nostril.

c.—Exposed culmen long, almost straight except at tip; height of bill at base less than one-third its length, the height and breadth equal at anterior edge of nostrils..*Stelgidocichla*

c'.—Exposed culmen short, curved throughout; height of bill at base more than one-third its length, its height at anterior edge of nostril greater than its breadth at same point.

d.—Frontal feathering extending on operculum nearly to middle of nostril; rictal and narial bristles shorter and weaker; bill much stouter, more compressed.

Andropadus

d'.—Frontal feathering not extending beyond posterior edge of nostril; rictal and narial bristles longer and stronger; bill more slender, less compressed.

Charitillus

B.—Maxillar tomium with but one subterminal notch.

a.—Nostrils rounded oval.

b.—Nuchal hairs long (25 mm. or more) and not branched; throat feathers lengthened.

c.—Head not conspicuously crested; nasal operculum barely perceptible *Alophoixus*

c'—Head conspicuously crested; nasal operculum evident, at least posteriorly..... *Trichophorus*

b'—Nuchal hairs short (less than 20 mm.) and much branched; throat feathers not lengthened.

c.—Tarsus about equal to exposed culmen; height of bill at base not more than one-third the length of exposed culmen.

Bleda

c'—Tarsus at least one and one-fourth times the length of exposed culmen; height of bill at base more than one-third the length of exposed culmen.

d.—Rictal bristles weak, not reaching beyond anterior edge of nostrils; narial vibrissae few and weak; bill longer, less compressed, its height at base decidedly less than its breadth..... *Thescelocichla*

d'—Rictal bristles strong, about two-thirds the length of bill, reaching far beyond the anterior edge of nostrils; narial vibrissae long and numerous; bill shorter, more compressed, its height and breadth at base about equal *Idiocichla*

a'—Nostrils linear or lengthened oval.

b.—Tarsus shorter than exposed culmen; wing more than five times the length of the tarsus..... *Thapsinillas*

b'—Tarsus longer than exposed culmen; wing less than five times the length of the tarsus.

c.—Height of bill at base more than one-third the length of exposed culmen.

d.—Nostrils linear or nearly so; frontal feathering extending on operculum at least to middle of nostril; rictal bristles reaching to about middle of bill.

c.—Tail about equal to wing; bill stout, somewhat compressed *Chlorocichla*

c'—Tail shorter than wing; bill rather slender, somewhat depressed..... *Arizclocichla*

d'—Nostrils lengthened oval; frontal feathering not extending beyond posterior edge of nostrils; rictal bristles not reaching to middle of bill.

c.—Bill stouter, relatively shorter, somewhat compressed, about equal in height and breadth at base; nuchal hairs shorter..... *Atimastillas*

c'—Bill weaker, relatively longer, depressed, its height at base decidedly less than its breadth; nuchal hairs longer..... *Prosphorocichla*

c'—Height of bill at base not more than one-third the length of exposed culmen.

d.—Tail shorter, about three-fourths of wing....*Bacopogon*

d'.—Tail longer, about nine-tenths of wing, or more.

c.—Tarsus less than one and one-fourth times the length of exposed culmen.

f.—Culmen straight or slightly concave, except at decurved tip; gonys decidedly ascending; bill about equal in height and breadth at anterior edge of nostrils, its height at base much less than one-third of exposed culmen.

Argalcocichla

f'.—Culmen curved from base; gonys almost straight; bill higher than broad at anterior edge of nostrils, its height at base about equal to one-third of exposed culmen....*Acritillas*

e'.—Tarsus more than one and one-fourth times the length of exposed culmen.

f.—Bill shorter and relatively stouter, somewhat depressed, equal in height and breadth at anterior edge of nostrils, the culmen curved from base; nuchal hairs shorter and not branched*Ixonotus*

f'.—Bill longer and relatively more slender, somewhat compressed, higher than broad at anterior edge of nostrils, the culmen almost straight except at tip; nuchal hairs longer and much branched.....*Phyllastrephus*